CHAPTER 40B DEVELOPMENT GUIDELINES FOR THE TOWN OF WESTFORD, MA

Prepared and approved by

Chapter 40B Performance Standards Committee

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1.0 GENERAL OBJECTIVES

Believing it to be important to its continuing vitality, the Town of Westford seeks to develop more affordable housing options within the community to support the broad demographic mix that has historically characterized the Town. Potential residents include not only newcomers, but also young current residents seeking to start their own independent lives, established residents seeking to downsize, and elders wishing to remain in the community to which they have contributed. To that end, Westford has enacted a number of provisions within its Zoning Bylaw that provide individuals and developers with options and incentives to economically build modestly-priced units for rental and purchase. Current provisions are contained within the following Bylaw sections:

- Accessory Dwelling Units (ADU) (Section 3.3)
- Dwelling Units Not Subject to Section 6.3, Growth Management (Section 6.3.6)
- Flexible Development (Section 7.2)
- Assisted Living Facilities (Section 7.3)
- Senior Residential Multifamily Overlay District (SRMOD) (Section 8.4)
- Mill Conversion Overlay District (MCOD) (Section 8.5)

In addition to these provisions, Westford has developed an *Affordable Housing Action Plan* for expanding its inventory of affordable housing to the level recommended by the Commonwealth under MGL Chapter 40B. This *Chapter 40B Development Guidelines* document supports that plan, and provides information to guide developers in creating proposals that will meet Westford's goals, recognizing site and neighborhood uniqueness. Chapter 40B projects increase the density of development and thereby disproportionately affect the community. Guidelines are provided not to impede the provision of affordable housing units, but to promote the quality of their design and implementation.

The affordable housing development process will involve balancing multiple and sometimes conflicting considerations, including:

- Applicable laws and regulations of both the Town and the Commonwealth.
- The Town, its characteristics, ecology, needs, demographics and vitality, both now and for the future.
- The abutters, both immediate and area.
- The future residents of the development.
- The developers, within the scope of their legal rights.
- Impacts on adjacent towns.

The values provided in the individual stated ranges for factors set forth in this document should not be collectively maximized in any single development plan. Chapter 40B developments are <u>much</u> less likely to be functionally successful if many or most factors are "pushed to the limit." A development plan that seeks to selectively give and take on individual factors in order to fit the project to the site and to neighborhood specifics, will be considered more constructive and in keeping with the general flexibility these guidelines seek to allow, and will facilitate the review process.

Note that, even if an application appears to meet the guidelines provided herein, the Zoning Board of Appeals retains the right to deny the project for good cause or to place conditions on an approval.

Applicants for Comprehensive Permits are responsible for checking current Westford bylaws and regulations, including those cited in Section 2.0 below. If conflicts exist between this document and those references, the requirements stated in the referenced documents may have precedence.

The Westford Zoning Board of Appeals shall have responsibility for this document's contents and maintenance, with the consensus of the Town committees, boards, and staff that oversee development.

2.0 APPLICABLE DOCUMENTS

This Guidelines document, and the following, are among the Town documents that relate to the granting of Comprehensive Permits and the provision of affordable housing in Westford. Copies are available from the Town Clerk:

- 1. Zoning Bylaw, Chapter 173 of the Code of the Town of Westford, current edition.
- 2. Westford Affordable Housing Committee, Westford Affordable Housing Action Plan Planned Production in accordance with 760 CMR 31.07(1)(i), March 2004 or current edition. Approved by Mass. Dept. of Housing and Community Development (DHCD) on August 6, 2004. This is the principal document governing affordable housing in Westford.
- 3. Westford Zoning Board of Appeals, *Rules and Regulations for Ch. 40B Comprehensive Permit Applications*, current edition.
- 4. Westford Board of Health, *Requirements for the Subsurface Disposal of Sanitary Sewage*, dated August 14, 2000, effective October 1, 2000, or current edition.
- 5. Westford Conservation Commission, Local Non-Zoning Wetlands Bylaw, Chapter 171 of the Code of the Town of Westford, current edition, and Local Wetlands Bylaw Rules and Regulations, Chapter 235 of the Code of the Town of Westford, current edition.
- 6. Westford Planning Board, Rules and Regulations, current edition.
- 7. Westford Planning Board, *Traffic and Pedestrian Safety Manual*, current edition.

3.0 PRINCIPLES

In order to plan and manage growth so that essential municipal services, efficient educational services, and affordable community services will be available for all citizens, while developing affordable housing options, the following principles shall be considered as a minimum:

- 1. <u>Proactive Posture</u> -- A diverse housing option mix, spanning a range of prices and rental/ownership models, is seen as a positive driver of the Town's quality of life and vitality. Given the current scarcity of rental units, adding more studio and one- and two-bedroom apartments is a particular focus.
- 2. <u>Quality and Responsibility to Future Tenants</u> -- The proposed development's design elements must afford residents a high quality product and a low cost of ownership and/or maintenance.

Submitted plans are expected to represent a quality implementation, with construction materials and methods representing best practice.

- 3. <u>Mixed Uses</u> While Westford has migrated toward "separation of uses" as a zoning philosophy, while retaining some older zoning districts that permit mixed uses, consideration of mixed uses where not currently permitted is possible. In some circumstances, it may be appropriate to encourage affordable housing options within commercial districts, or limited convenience-type commercial operations within residential districts. The objective, when appropriate, is to afford residents ready access to shopping amenities, thus reducing automobile dependence.
- 4. <u>Conversion of existing structures</u> Mill conversions are encouraged. Such conversions not only capitalize on existing large structures without increasing the apparent structural density of the neighborhood, but they preserve part of the Town's history and legacy. The same principle applies to schools, large barns, and similar historic structures, should they become available.
- 5. <u>Distribution vs. Concentration</u> In most cases, concentrating affordable and high-density developments in any one area is to be avoided. Distributing small-scale developments throughout the town is more likely to minimize local impact and to contribute to aesthetics and community development balance. Exceptions may be allowed for well-designed implementations that are compatible with unique characteristics of the immediate area such as isolation, topography or soil conditions, or that are located in heavily developed commercial or industrial districts.
- 6. <u>Visual Screening</u> Development designs should incorporate site-appropriate buffers, berms, plantings and other transitional screening design devices to integrate the proposed development into the neighborhood with minimum visual impact. Such design elements should maximize aesthetics for both the development residents and their neighbors.
- 7. Community Amenities Including spaces that promote social activities and community interaction, appropriate to the proposed occupancy demographic, is highly encouraged. Examples might include parks, meeting spaces, walking trails, and/or a recreation area, especially when children might be expected to be an important population, either as residents or visitors. Access or extensions to existing amenities such as sidewalks and bicycle and walking trails is also encouraged. The developer may provide additional amenities such as transportation to retail areas.
- 8. <u>Accessibility</u> Design of units and facilities to be accessible to persons with disabilities is required.
- 9. <u>Energy Conservation</u> In keeping with ecological concerns, and to help lower the cost of ownership, energy conservation measures should be incorporated into the project plans, including but not limited to:
 - a. Air leakage control tight weatherization and heat recovery ventilation.
 - b. *High insulation* walls, roof and foundation.
 - c. *High-efficiency heating system and controls* -- high efficiency furnace/boiler, programmable thermostats.
 - d. Glazing -- high efficiency, with heat mirrors.
 - e. Solar -- Passive and active.

f. *Appliances* – Energy Star appliances in individual dwelling units and common areas, e.g. laundry room and common recreation areas.

Additional, detailed suggestions for energy conservation are found in Appendix B of this document.

4.0 **DEFINITIONS**

- 1. <u>Density</u>. Determined on the basis of land available as defined in *Westford Zoning Bylaw* requirements, i.e., the land area must contain at least 75% dry land, and not more than 25% wetland. Wetlands in excess of 25% of the entire parcel shall not be used for purposes of calculating density.
- 2. Apparent Density. Accounts for the visual impact, including but not limited to:
 - Structure height,
 - Building style and placement,
 - Number of structures relative to parcel size,
 - Screening, and
 - Architectural treatments with respect to other dwellings and structures in the neighborhood.
- 3. <u>Residential</u>. A neighborhood characteristic of one- and two-story dwellings on lots of varying sizes, which could include RA and RB districts as defined in the *Zoning Bylaw*.
- 4. <u>Bedroom</u>. In general, based on State and local regulations, a newly-constructed bedroom must contain or provide, as a minimum: (a) privacy; (b) minimum floor space of 70 sq. ft.; (c) minimum ceiling height of 7 ft. 3"; (d) electrical service and ventilation; and (e) one exterior door or openable emergency escape window with a net clear opening of 3.3 sq. ft., operable from the inside. Kitchens, bathrooms, and general living areas having the above characteristics shall not be considered as bedrooms.
- 5. <u>Potential bedrooms</u>. Rooms or spaces, e.g., attic or basement, clearly intended to be capable of being expanded in the future to accommodate additional sleeping areas by virtue of being roughed in or having available structure or utilities. A loft shall also be considered a potential bedroom.
- 6. Total Effective Bedrooms. Frequently, housing, especially affordable housing, is constructed with a limited number of finished bedrooms to control cost, with additional space partially roughed-in to allow for the addition of future bedrooms. Only a portion of these spaces may ever be converted, but they must be considered in overall density impact assessment. Such determination is especially important in the case of common septic systems, to prevent an overload failure that would impact all dwellings in the development. Thus, total effective bedrooms shall be considered to be the sum of the actual bedrooms plus 100% of the potential bedrooms.
- 7. <u>Acre.</u> 43,560 sq. ft. This "full acre" is slightly larger than the "builder's acre" of 40,000 sq ft used in the *Zoning Bylaw*, and is used in this document for density calculations (see Section 5.0).

5.0 DENSITY

Multifamily as a 40B 5. Mill Conversion

as a 40B

n/a

In large measure, a development's feasibility is driven by dwelling unit density. Developers seek to maximize density to offset land acquisition and infrastructure costs. Opposing these higher densities, however, are a host of considerations, including the site's carrying capacity, neighborhood attributes, public safety, environmental and septic system factors, topography, subsurface conditions, massing, and apparent density.

This section defines development density guidelines in terms of site occupancy, determined on the basis of land available (total acres, not including wetlands in excess of 25% of the parcel). Note, however, that potential occupancy density is but one aspect of the larger consideration of "apparent density," as defined in Section 4.0 above. In considering the final number of units to be allowed under a Comprehensive Permit, the Zoning Board of Appeals will consider not only the occupancy guidelines set forth in this subsection, but also these other factors.

Table 5.1 establishes recommended baselines for potential occupancy density in typical development settings, by type of dwelling unit and development setting. Note that these density ranges may not always be feasible, especially on smaller lots, because of soil conditions and other septic system factors. Table 5.2 recommends maximum parcel size and minimum open space factors, by development setting. The density ranges and parcel size factors have been established so as not to excessively impact adjoining neighborhoods. The open space factors are scaled to encourage the retention of open space, even on small parcels, and 40B developers are strongly encouraged to meet them. Minimum open space requirements exist in current local zoning for commercial, industrial, and Open Space Residential Development (OSRD) settings.

All other *Zoning Bylaw* provisions, e.g., setbacks, buffers, and open space, and all other local bylaws and regulations must be satisfied by the development plan, unless specific waivers are sought by the developer via the Comprehensive Permit process.

Type of Dwelling Unit Townhouses Apartments Single-Family and Density (attached multi-family) (attached single-fam.) **Dwelling Units** Ranges Number Effective Effective Effective Number Number Development Setting of units Bedrooms of units Bedrooms of units Bedrooms 1. Residential 2 - 4 6 - 12 4 - 8 10 - 20 10 - 12 20 - 24 30 - 40 2. Commercial and 8 - 1212 - 16 20 - 25 40 - 50 24 - 36 **Industrial** 3. Assisted Living 6 - 8 6 - 16 n/a n/a n/a n/a Facility as a 40B 4. Senior Residential 2 - 4 5 - 10 2 - 4 5 - 10 8 8 - 16

n/a

Table 5.1. Recommended Density Ranges, per Acre

n/a

n/a

15 - 20

30 - 40

Table 5.2. Recommended Parcel Size and Open Space Factors

Development Setting	Maximum Parcel	Minimum Contiguous
	Size (PS) (acres)	Open Space
1. Residential	20	10% of PS, if PS under 3 acres
2. Commercial and Industrial	50	25% of PS, if PS between 3 and 10 ac.
3. Assisted Living Facility as a 40B	20	50% of PS, if PS 10 acres or over
4. Sr. Resident. Multifamily as a 40B	20	
5. Mill Conversion as a 40B	Per site definition	Maximum possible

6.0 ARCHITECTURE AND DESIGN

6.1 Design Preferences

The "look and feel" of any 40B development in relation to its site, neighboring structures, and the overall community is a vitally important factor in assessing its success. A development which crowds its site, has a box-like design, or towers over surrounding structures will be less successful than one which is designed to more graciously blend into its neighborhood. Good architecture and design will lead to less neighborhood resistance and a more efficient and prompt application review process.

This section will enumerate various aspects of building architecture and design, so as to indicate the Town's general preferences.

Table 6.1 Architectural and Design Preferences

Aspect	More preferred design	Less preferred design
Site Design and Screening	Site design should proceed, in order, by: 1. Identifying important natural features (large trees, groves, outcroppings, unusual topography, prevailing winds, water features, sun direction) and important man-made features (stone walls, trails, old roads). 2. Developing road layouts to maintain and enhance these features. 3. Basing building layouts on the road system so developed. 4. Buffering and screening the development to preserve the look and feel of the neighborhood.	Maximizing the number of units possible on the site without regard to the natural, man-made or neighborhood fabric of the parcel.
Massing	Single-family residences are preferred. If townhouse, not more than four units per building. If apartments, not more than 24 units per building. Multi-unit buildings should have breaks in the facade and roof so as to minimize large planar areas.	If townhouse, five or more units per building. If apartments, 25 or more units per building,

Table 6.1 Architectural and Design Preferences (continued)

Aspect	More preferred design	Less preferred design
General building design	Harmonious with residences in the	Inconsistent with residences
	neighborhood; if multi-family, looks like a	in the neighborhood; if
	large single-family residence. The town	multi-family, is easily read as
	has many examples of older farm houses	multiple units. Repetition of
	with numerous additions ("New England	identical units is strongly
	continuous") and large Victorian era	discouraged.
	residences to serve as massing and	
	detailing models for multi- and single-	
	family homes.	
Maximum height	Consistent with structures in the	As allowed by zoning (35
C	neighborhood, typically $1.5 - 2.5$ stories.	ft.), or more.
Setbacks	Not crowding the lot; generous setbacks	As allowed by zoning, or
	from abutters. Front setbacks are	less.
	consistent with the neighborhood if	
	buildings front on the street.	
Floor plans and unit sizes	A mixture of several models in a building	A single model in a building
1	and in the development so as to emulate	and/or in the development.
	the historical growth pattern of the Town.	•
	This pattern includes a mix of harmonious	
	styles due to similar detailing and features,	
	e.g., steep slopes for roofs, overhangs at	
	roofs, and shingle roofs; clapboard or	
	shingle siding with strong molding details	
	at facias, corners, base of walls, top of	
	walls, window surrounds, and door	
	casings; use of paneled doors with	
	sidelights and multi-pane windows.	
Design of affordable units	Indistinguishable on the exterior from	n/a
	market rate units; not grouped by	
	themselves (mandatory).	
External parking areas	Well screened, not visible from the street,	Large, poorly screened
1 0	and to the rear of structures. If between	parking areas, visible from
	buildings, well screened by landscape	the street.
	features like plantings, stone walls, and/or	
	fencing. No more than six cars to an area	
	without intervening landscape features.	
Hard surface covering	Minimized, to promote groundwater	
(paving, etc.)	absorption and for general good design.	
Garages (on flat lots)	Attached or detached, at the same	Under living area so as to
	elevation as the first floor of living area.	raise all floors.
Garages (on sloping lots)	On naturally sloping sites where	Under living area so as to
<i>C</i> (* * * * * * * * * * * * * * * * * * *	topography makes garages under the	raise all floors.
	living area feasible, without raising the	
	overall building profile or creating	
	excessive paving.	
	checosive paving.	

Table 6.1 Architectural and Design Preferences (concluded)

Street and common	Sufficient in width and curve design to	
driveway design	allow movement of multiple emergency	
	vehicles, typically double lanes.	
Individual driveway design	Driveways emulate the typical drive,	Multiple lanes or multiple
	typically one lane.	driveways.

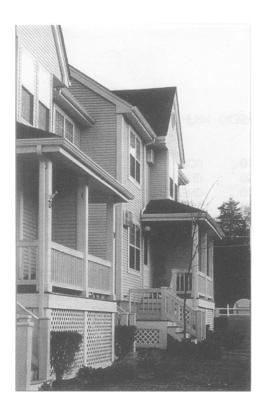
6.2 Design Examples

Examples of good designs and design principles may be found in the Town of Westford *Design Standards for Flexible Development*, Dodson Associates, first draft dated July 12, 1999. Other references are available from the Assistant Town Manager and from the Town Planner.

The next two pages depict homes in Ch. 40B developments recently built in Massachusetts, and are taken from *The Homes of 40B – Case Studies of Affordable Housing Using the Comprehensive Permit*, published by Citizens' Housing and Planning Association (CHAPA) in May 2001. They depict single-family and duplex units in Sudbury, Taunton, Westwood, Newton, and Gill, MA, and use design elements from the indigenous architecture of those areas to provide attractive homes that fit well with their surrounding neighborhoods. Many of these homes have rear or detached garages, or just use on-street parking.

Many of the condominium developments on Cape Cod exhibit excellent design by using clean lines, by being small scale, and by fitting well into their neighborhoods. Another excellent example is the Brookfield Commons 40B townhouse development off Hayden Road in Groton, MA, just past Forge Village.





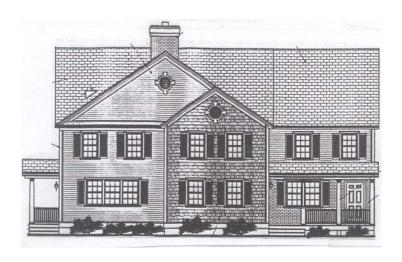


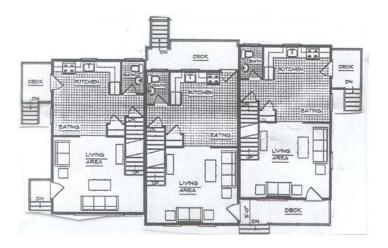


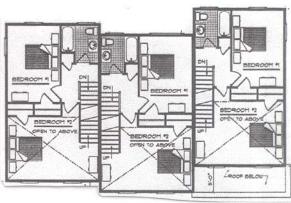




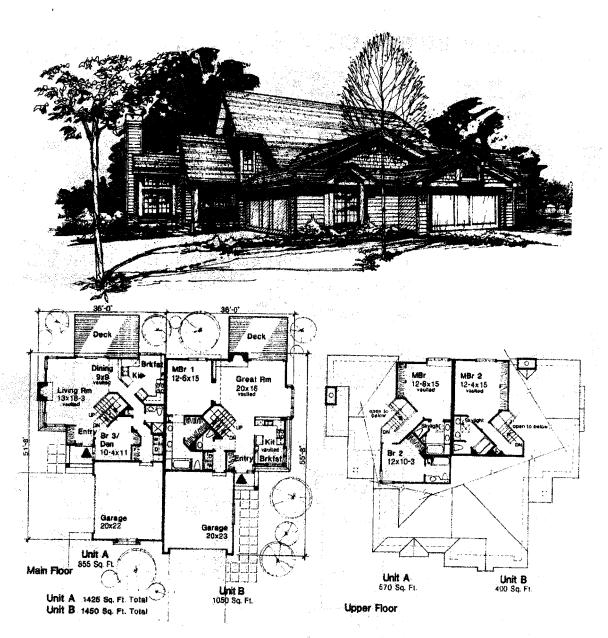
Below is a three-unit multi-family building that will be constructed in Westford under a recently granted Comprehensive Permit. Each unit has two stories of living space, plus a loft with skylight over the back bedroom. There is one garage per unit, accessed from the rear at the basement level on a sloping lot. The front facade is broken into three planes by the side units having two differing setbacks from the middle unit; two of the units have side entrances. The overall look from the front is of a large single-family residence. This design meets many of the design guidelines stated in this document; however, the three units are essentially one identical model.







The duplex on this page is an example of a more contemporary design that gives the overall appearance of a large single-family home. Reference: *Home Designs Volumes 18-21, Single and Multi-Family Plans*, published by John D. Bloodgood, Architects, PC, Des Moines, IA 50312.



This dramatic duplex is full of exciting features to surprise the builder and buyer who think they've seen it all in duplexes. Both garages are designed with the flexibility to be front or side facing to adept to any site. Each unit has unique massing and private entry porches so the duplex does not look and feel like identical twins:

Inside the homes have vaulted living rooms with fireplaces, sliders to private decks, corner transom windows, and angled staircases to the second floors. The kitchens have bright breakfast rooms and pass through counters to the dining areas.

in the three bedroom Unit A design the third bedroom is located on the main floor and can serve as a den or private guest room. The two upstairs bedrooms each have their own private bath. The master bedroom has a vaulted ceiling, a window seat, and a skylight in its bath. Unit B is a dual master suite design, each with exciting master bedrooms.

7.0 HEALTH AND ENVIRONMENT

7.1 General Wastewater Disposal System Guidelines

The Westford Board of Health (BOH) administers and enforces both local and state sanitary codes. It has authority to approve or disapprove wastewater disposal (septic system) plans. It provides recommendations to the Zoning Board of Appeals (ZBA) relative to waivers from local health regulations requested by 40B applicants. Waivers to the state sanitary code cannot be granted by the BOH or the ZBA for new construction or for increased flows to existing systems.

The following table compares major local and State requirements applicable to wastewater disposal system design. Since no two sites or developments are identical, the BOH will use its discretion as to which (if any) local regulations may be relaxed and to what extent. This determination will be based upon the specific waivers requested by the applicant, together with the soil characteristics, proximity of wetlands or other sensitive areas, and/or any other factors deemed applicable by the BOH.

Table 7.1 Wastewater Disposal Requirements Comparison

Factor	State requirement (Title V)	Westford requirement	
1. Minimum offset from leaching area:			
a. Bordering Vegetated Wetland (BVW)	50 ft.	100 ft.	
b. Certified vernal pool	100 ft. (*)	100 ft.	
c. Retention/detention pond or basin	25 ft.	100 ft.	
d. Subsurface stormwater infiltration structures (> 5000 gallons)	25 ft.	50 ft.	
* The required setback shall be 50 ft., where the applicant has provided hydrogeologic data acceptable to the approving authority demonstrating that the location of the soil absorption system is hydraulically down-gradient of the vernal pool. Surface topography alone is not determinative.			
2. Area available on lot for construction of new subsurface sewage disposal system	None	Minimum of 1000 sq. ft. available on each single-family residential lot for primary leach area; minimum of 1000 sq. ft. available for reserve or replacement leach area	
3. Co-location of septic system and the structure(s) it serves	None	Septic system must be located on the same lot as the structure(s) it serves	
4. Soil percolation rate for new construction	Less than 60 minutes per	An established rate of less	
	inch	than 20 minutes per inch	
5. In-season groundwater determination	None	Required (March - April)	
6. System capacity	110 gallons per bedroom per day	150 gallons per bedroom per day	
	uay	per day	

Table 7.1 Wastewater Disposal Requirements Comparison (continued)

Aspect	State requirement (Title V)	Westford requirement
7. Hydrogeological studies to determine	May be required if system is	May be required at the
underground water flow	designed for 10K gallons per	discretion of the BOH
	day or greater	
8. Mounding calculations to determine	May be required if system is	May be required at the
potential mixing of groundwater and	designed for 10K gallons per	discretion of the BOH
effluent	day or greater	
9. Show topographical and subsurface	Not required	Required
features or structures existing or proposed		
within 150 ft. of disposal system on plans		
10. Design separate reserve area, or build	Not required	Required
reserve at same time as primary.		
11. Separation of private drinking water	At least 50 ft.	At least 100 ft.
well from tank or pump chamber		

The following table indicates general BOH preferences relative to specific design factors for wastewater disposal systems.

Table 7.2 Westford Board of Health Preferences

Factor	More preferred design	Less preferred design
1. Reserve system	Not interlaced with primary system,	Interlaced with primary system, or
	or designed and constructed to be	designed to preclude separate
	workable if primary system fails	workability
2. Paving over system	Not paved over either system,	Paved over reserve system only,
components (if primary	or paved over primary system only	or paved over both
and reserve systems are		
separate from one another)		

7.2 General Environmental Protection Guidelines

The Westford Conservation Commission (ConsComm) administers and enforces both local and state environmental protection codes. It promulgates Orders of Conditions that protect the environment, primarily groundwater, from negative impacts caused by development. The ConsComm cannot grant waivers from local regulations. It provides recommendations to the Zoning Board of Appeals (ZBA) relative to waivers from local environmental regulations requested by 40B applicants. Waivers to the state environmental protection code cannot be granted by the ConsComm or the ZBA.

The following table compares state and local requirements applicable to environmental protection.

Table 7.3 Environmental Protection Requirements Comparison

Activity	State requirement	Westford requirement
1. Installation of septic	No specific prohibition (presumes	No septic/sewage component may
systems	compliance with Title V will	be installed within 100 ft. of
	protect interests identified under the	wetlands (some exceptions for
	Act)	school-related projects).
2. Storage of salts, heavy	No specific prohibition	Prohibited within 100 ft. of
metals, toxic substances,		wetlands
petrochemical products,		
fertilizers, or pesticides		
3. Dumping of any	No specific prohibition	Prohibited within 100 ft. of
material		wetlands.
4. Setbacks from wetlands:		
a. For work on a lot with	a. No specific setback. Any	a. Limit of work: 30 ft.
an existing structure, where	activity within 100 ft. of a protected	Limit of building: 55 ft.
work is proposed on an	area is subject to State regulation,	
artificial surface area of the	as administered by the local	
lot.	Conservation Commission.	
b. For work on a lot with	b. (Same as item a.)	b. Limit of work: 50 ft.
an existing structure, where		Limit of building: 75 ft.
work is proposed within an		
existing non-artificial		
surface area.		
c. For work on an	c. (Same as item a.)	c. Limit of work: 50 ft.
undeveloped lot.		Limit of building: 75 ft.

The State Environmental Protection Act includes the Rivers Protection Act, which extends jurisdiction to 200 ft. from the bank of perennial streams. There are general performance standards, depending on the size and kind of project, which are hard to depict in tabular form. The local bylaw has no similar provision.

8.0 OTHER GUIDELINES

8.1 Traffic

If the project will generate 30 trips or more new vehicle trips on site in any single hour of the day, a traffic study as referenced in the Town of Westford *Traffic and Pedestrian Safety Manual* shall be developed by the applicant, with mitigation measures sponsored and funded by the applicant. This document is now in draft form and is expected to be approved by the Planning Board shortly.

The applicant may be asked to help improve the design and/or construction of adjacent streets in order to mitigate known traffic problems.

It is highly desirable to have access for emergency vehicles around the entire building(s) contained in the development. It is also highly desirable to have two points of access to existing local street(s). Each building, unit or apartment shall have affixed thereto a number representing its address; such number shall be of a nature, size and contrasting color, and shall be situated on the building so that, to the extent practicable, it is visible from the nearest street or road providing vehicular access to the building. Recommendations as to all safety requirements, including sprinklers, hydrant and cistern locations, and alarm system tie-in to Fire Department systems shall be provided by the Fire Safety Officer and a representative of the Westford Police Department as determined by the Chief of Police.

8.3 Exterior Lighting

The lighting used to illuminate an off-street parking area, sign or other structure shall be arranged as to deflect light away from adjoining properties and public streets. Unless specifically otherwise approved, no light post shall exceed 20 ft. in height from the applicable surface grade, and fixtures shall be of a type having a total cutoff of less than 90 degrees, and shall not direct light onto abutting sites. Further, any lights that cast light on nearby residential properties shall not exceed 0.4 foot-candles (meter reading) as measured from said property, and shall not adversely create glare or distraction to vehicle operators on adjacent roads.

9.0 SEVERABILITY

Should any portion or provision of these guidelines prove invalid, that occurrence shall not invalidate any other portion or provision herein.

Appendix A. IMPLEMENTATION AND COMPREHENSIVE PERMIT PROCESS

The following summarizes key considerations and process steps. The specific detailed requirements are included in MGL Chapter 40B and the documents cited in Section 2.0, Applicable Documents.

- 1. <u>Application</u> -- The Comprehensive Permit application process is defined in the Westford Zoning Board of Appeals *Rules and Regulations for Ch. 40B Comprehensive Permit Applications*. The applicant must model the development per *Westford's Zoning Bylaw*, Chapter 173 from the Code of the Town of Westford, and specifically enumerate the variances from this Bylaw that are sought before the Zoning Board of Appeals.
- 2. <u>Non-profits</u>. Non-profit housing development organizations are encouraged to participate, e.g., Habitat for Humanity.
- 3. <u>Information Sharing</u> As a minimum, the developer's initial application, subsequent modifications and Zoning Board of Appeals findings on the developer's variance requests, will be forwarded to the following Town entities, with a request for comment:
 - a. Board of Selectmen
 - b. Affordable Housing Committee
 - c. Planning Board
 - d. Conservation Commission
 - e. Board of Health
 - f. Fire Department
 - g. Police Department
 - h. Town Engineer
 - i. Building Inspector
 - j. Highway Department
 - k. Historical Commission
 - 1. School Committee
 - m. Master Plan Implementation Committee
 - n. Water Department
 - o. Town Counsel
- 4. <u>Information Sharing Tool</u> The ZBA will publish, maintain and distribute updated status reports to the above entities. This report will list all developer-requested variances from local bylaws and regulations, including but not limited to the *Westford Zoning Bylaw*. For each requested variance, the status report will provide, as a minimum, a summary of the dated inputs from the above entities, the ZBA's assessment of the requested variance in light of those inputs, and the ZBA's decision with respect to that requested variance.
- 5. <u>Coordination With Other Towns</u>. Efforts will be made to prevent impacts to adjacent towns. If material impacts are likely because of a development, the affected town will be advised, and their input sought.
- 6. Expert Resources -- The Zoning Board of Appeals will be the Permitting Authority as set forth in MGL Chapter 40B, but will actively seek the input of other Town Boards, Departments and Agents to insure quality development design and implementation. Outside consultants will be engaged as needed to provide additional expertise, with reasonable fees borne by the developer to meet these needs.

- 7. <u>Affirmative Action</u>. Marketing plan affirmative action provisions should comply with provisions of applicable law.
- 8. <u>Local Preference</u>. Local preference for selection of occupants of affordable units is supported to the maximum degree allowed by law.
- 9. <u>Inventory Preservation.</u> In keeping with the Town's goal of maintaining a diverse housing option mix, as a condition of the Comprehensive Permit, Town-approved deed restrictions shall be recorded at the Registry of Deeds to ensure that affordable dwellings remain as such in perpetuity.
- 10. <u>Selection Process Integrity</u>. To insure that the "higher objectives" envisioned by Chapter 40B are truly achieved, scrupulous attention shall be paid to the affordable unit occupant selection process to guarantee a fair and open process, devoid of "creative" application strategies including, but not limited to:
 - Creative applicant asset accounting by hiding or transferring disqualifying assets.
 - Favored access for "insiders."
 - "Nominal" applicants as proxies for others.

Appendix B. ENERGY CONSERVATION

The following is a "Top Ten" list of energy efficient home improvement measures. It should be noted that where these measures exceed current building code requirements, code requirements are generally being updated to reflect these more stringent measures.

1. <u>Insulation and air leakage</u>. Homes should meet or exceed EnergyStar levels. This means achieving an 86 or greater on the HERS (Home Energy Rating System) rating scale. The definition and requirements can be found at www.energystar.gov/index.cfm?c=new_homes.hm_earn_star. The local program is managed by Conservation Services Group, and information can be found at www.energystarhomes.com. In general, this means:

Walls should have a minimum R value of 19.

Roofs should have a minimum R value of 38.

Foundations should have a minimum R value of 10.

Air leakage, as determined by blower door depressurization testing, should be less than 1.25 sq. in. per 100 sq. ft. leakage ratio, calculated at a 4 Pascal pressure differential; or less than 0.25 cfm (cu. ft. per min.) per sq. ft. of building enclosure surface area at a 50 Pascal air pressure differential, per ASTM (American Society for Testing of Materials).

- 2. Windows. All windows should be EnergyStar labeled, or have a maximum U value of 0.35.
- 3. <u>Heating equipment.</u> All furnaces and boilers should be closed combustion and have a minimum efficiency rating of 90% for furnaces and 87% for boilers.
- 4. <u>Air conditioning</u>. All air conditioning units, if provided, should be 13 SEER (Seasonal Equipment Efficiency Rating), minimum. Room air conditioning units should be 10 SEER, minimum.

5. <u>Ventilation.</u> All homes should have mechanical ventilation in accordance with ASHRAE (American Society of Heating and Refrigeration Engineers) 62.2.02 requirements.

Base rate ventilation: a mechanical ventilation system should be installed that is designed to provide ventilation at the ASHRAE 62.2 rate of 7.5 cfm per person plus 0.01 cfm per square foot of floor area. The number of persons will be calculated by counting the master bedroom as two people, and secondary bedrooms as one person each. The system should be operated at a modified rate of 7.5 cfm per person.

- 6. <u>Applicances.</u> All appliances should be EnergyStar labeled. This will include dishwashers, refrigerators, washing machines, and dryers, where provided.
- 7. <u>Lighting</u>. All installed lighting fixtures should be fluorescent, with the exception of accent lights and lights used for facial illumination.
- 8. <u>Ductwork</u>. If a ducted heating and cooling system is provided, all ductwork should be located within the conditioned space of the building enclosure.
- 9. <u>Water management.</u> Homes should provide appropriate water management details. This means perimeter drains where the foundations extend below the seasonal high water table. This also means providing a drainage plane over the exterior sheathing and flashing systems at window and door openings.
- 10. <u>Basements</u>. If basements are provided, floor and wall insulation should be provided using systems that will not be conducive to the growth of mold. These spaces are often turned into living areas and will certainly be used for storage.